



# UNITED STATES PATENT AND TRADEMARK OFFICE

*mn*  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,373	09/30/2003	Stefan Jesse	09700.0216-00	3224
60668 7590 07/30/2007 SAP / FINNEGAN, HENDERSON LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			EXAMINER VU, TUAN A	
			ART UNIT 2193	PAPER NUMBER
			MAIL DATE 07/30/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/676,373	Applicant(s) JESSE ET AL.	
	Examiner Tuan A. Vu	Art Unit 2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 June 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This action is responsive to the Applicant's response filed 6/04/07.

As indicated in Applicant's response, claims 1-2, 10-11, 18 have been amended. Claims 1-22 are pending in the office action.

#### *Double Patenting*

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 8, 18 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 4, 12, 19 of copending Application No. 10,676,374 (hereinafter '374).

Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following example of conflicting claims.

As per instant claim 8, depending '374 claim 4 recites a first data model being used to derive an API and employing the API to access development objects. But '374 claim 4 does not explicitly recite (i) first model defining development objects as building blocks for the application; (ii) generate intermediate objects therefrom and (iii) using the set of intermediate objects as inputs to generate the API, the model including (iv) a language extension used to implement a feature of the API such as an indication of a file border.

However, '374 claim 4 recites a variation of the language teaching limitations (i) and (ii) via the recital of 'defining file borders comprising identifying of development objects to be included in a file ... in the data model ... to be children of the main ... object that are not identified as main...objects', the intermediate objects being added objects to the file of the main object including development objects defined in the data model. As for (iii)-- *using the set of intermediate objects as input for the API generating*—'374 claim 4 includes file storing user-defined code associated with the main development object; and for one skill in the art, having a definition file (see '374 claim 4) in light of objects being defined in '374 claim 3 – i.e. one of ordinary skill would recognize these defined objects as well-known GUI components of an application interface, API - to necessarily support user's development via instantiating one such API for accessing model objects; and this as a whole would be equivalent to (iii), or otherwise obvious variation thereof. As for the customizable extension comprising a file border indication referred to as (iv), this is suggested in '374 reciting of 'defining file borders for development', and storing development objects in a repository based on the file borders, and accessing these objects via the API (\*); so that one skill in the art would be motivated to provide an extension structure obtained from the repository (e.g. template builder) in the course of the API derivation

Art Unit: 2193

with utilizing of information in the '374 stored file-based repository for the derivation. That is, the information thus extended (e.g. via a template builder) from the stored model/repository regarding a particular file border identity would be used to support the creation of API parameter or attributes which would be needed to access the very components stored from the '374 defining of file borders, as purported by the endeavor described as (\*) from the above.

**As per instant claim 18**, '374 claims 12 and 19 also recite an analogous language expressing receiving in a development method a model representing blocks for developing an application (being generated, repository storing development in a data model), deriving a API based thereon; and use the API to perform operations on a development object (e.g. API incorporating the feature defined by the model customizable extension during development of the application; OR API to access development objects).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 2-3, 11-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Specifically, claim 2 recites 'wherein the set of intermediate objects is **generated using** the second model'; this is no description any where in the Specifications enabling this. That is, not a single process in which generation of a set of intermediates clearly entails 'using the second model', e.g. the second model being an XML form; but rather, there is teaching that the set of intermediate objects are first based on the first model when generated, then serve as inputs to derive the API leading to creation of the second model. It is clearly stated that the set of intermediate objects creation is not utilizing this second model (Specifications, pg. 6, top), and this would make sense because by the time these intermediate objects were first created, the second model had not yet been created. The lack of description amounts to either a lack of description, an added new subject matter, and as such, it is deemed that the inventor has no possession of such limitation. Therefore, the limitation will be treated as broadly as possible given no patentable weight and very few merits; e.g. these intermediate have no direct effect on or from the second model.

Claims 3, 11-12 are also rejected for lack of description as set forth above, for the same reasons as in claim 2.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-22 are rejected under 35 U.S.C. § 102(b) as being anticipated by Charisius et al., USPN: 2002/0108101 (hereinafter Charisius).

As per claim 1, Charisius discloses a computer program product, tangibly embodied in an information carrier, for developing an application, the computer program product being operable to cause data processing apparatus to:

receive a first model in a first language (e.g. Fig. 3, 5- Note: language neutral representation being instantiated as SCI package 304 from core model 302 **reads on** model being in first language whose Java classes are building blocks – graphical view 204 in Fig. 2, or package classes view in Fig. 5 – representing a given development instantiated to form the SCT model ), the first model defining development objects representing building blocks for developing the application (e.g. Fig. 12-18);

generate a set of intermediate objects using the first model(e.g. Fig. 5; para 0061, pg. 4; TMM 200 – para 0058,pg. 4); and

using the set of intermediate objects, generate an API (e.g. para 0091, pg. 13; Fig. 7; para 0064-0067, pg. 4 – Note: using the packages of code represented in the model of Fig. 3, along with templated view of source code objects to generate an instance of RWI, IDE or SCI from the core API 702 **reads on** using intermediate objects to create one such API instantiated for further tasks) wherein the API enables accessing the development objects (e.g. IDE: *extract information from the model* – para 0065; *access information* – para 0068, pg. 4; para 0089-0090, pg. 13).

As per claims 2-4, Charisius discloses instructions to convert the first UML model to a second data model in a XML language (e.g. para 0099-0101, pg. 14 – Note: second language is XML, and first language is UML –see Fig. 12-18), wherein the set of intermediate objects is

Art Unit: 2193.

generated using the second data model (Fig. 9, 10; Fig. 21 - Note: using the second model is treated – refer to 35 USC § 112 - as related to the context of generating the second model ).

**As per claim 5**, Charisius discloses wherein the set of intermediate objects comprises Java objects (e.g. Fig. 5; Fig. 12-16; *java ...template* - para 0089-0090, pg. 13).

**As per claims 6-8**, Charisius discloses wherein the first language comprises a customizable extension (e.g. view 204, TMM 200, code editor 208 -Fig. 2; para 0064-0067, pg. 4 ); wherein the customizable extension is used to implement an additional feature of the API (e.g. para 0064-0067, pg. 4; Fig. 9), wherein the additional feature comprises an indication of a file border (e.g. *file is new... file ... been updated* -- para 0090, pg. 13– Note: repository of model – Fig. 2-5 --having files being enlisted for a project and identified for its update status **reads on** model extension with indication to file borders including management or versioning metric).

**As per claim 9**, Charisius discloses wherein the API comprises a copy and paste operation (e.g. Fig. 12-18, 22, 23; para 0090-0094, pg. 13 – Note: customization via user interface (see GUI pane with toolbar) to create instance of API from the core API of Fig. 7 whereby the IDE enables modeling and delete/add of development objects reads on GUI API in which *copy and paste* are features operable user's modifications of a UML view ).

**As per claim 10**, Charisius discloses a computer program product, tangibly embodied in an information carrier, for developing an application, the computer program product being operable to cause data processing apparatus to:

- receive a (first model in a first language);
- generate (a set of intermediate objects ...);
- all of which being addressed in claim 1;



and generate an XML schema ( ...using the set of intermediate objects as inputs) wherein the XML schema enables implementing the development objects (refer to claim 3).

**As per claims 11-14**, refer to the corresponding rejection as set forth in claims 2-5.

**As per claims 15-16**, Charisius discloses wherein the XML schema includes a tree based on aggregation relationships in the first data model; wherein the XML schema includes a reference based on an association relationship in the first data model (e.g. Fig. 24-25; Figs 26).

**As per claim 17**, Charisius discloses wherein the XML schema includes a complex type extension based on an inheritance relationship in the first data model (e.g. Fig. 12-18; *JAVA, group... defining elements, "hierarchy"*, para 0124-0126, pg. 18 – Note: UML and Java constructs parsed with construction of AC3 DTD and XML hierarchy reads on inheritance within some complex type in which a group is linked to constituting subelements).

**As per claim 18**, Charisius discloses a computer program product, tangibly embodied in an information carrier, for developing an application, the computer program product being operable to cause data processing apparatus to:

receive a first model (e.g. Fig. 3, 5 – Note: refer to claim 1);

derive an API based on the first model (e.g. para 0091, pg. 13; Fig. 7; para 0064-0067, pg. 4 – refer to claim 1); and

use the API to perform operations on a development object representing a building block for developing the application (IDE: *extract information from the model* – para 0065; *access information* – para 0068, pg. 4; para 0089-0090, pg. 13 – re claim 1).

**As per claim 19**, Charisius discloses wherein the API comprises an interface layer (e.g. para 0064-0067, pg. 4 Note: RWI API reads on interface layer wherein diagrams can be user

Art Unit: 2193

driven), a proxy layer (e.g. IDE API reads on proxy layer wherein information are channeled, extracted and filtered for the interface layer to used) a state layer (e.g. SCI API reads on state layer wherein data received as-is is just displayed for plain view and editing by the RWI).

**As per claim 20**, Charisius discloses wherein the operations comprise creating a new development object as a transient object (e.g. Fig. 12-18 ); and modifying the transient object until the transient object is committed to a persistent file (e.g. Fig. 12-18; ; para 0090-0094, pg. 13).

**As per claims 21-22**, Charisius discloses comprising instructions to destroy the transient object if a delete command is requested before the transient object is committed to a persistent file; and to mark the persistent file as deleted if a delete is requested after the transient object is committed to a persistent file (e.g. Fig. 2; Fig. 7; Fig. 10AB; Fig 24-26; para 0118-0119, pg. 17 – Note: use of TMM transient structure to enable modifying/removing – as in not marked for persisting or committed for file repository – using the created API when parsing DTD or XML data which are previously stored **reads on** modifying a transient object and generate code when such object is committed; while retrieving corresponding DTD/XML reads on reusable objects being committed for DB persistence from a previous development instance).

### ***Response to Arguments***

8. Applicant's arguments filed 6/04/07 have been fully considered but they are not moot in view of the new grounds of rejection.

### ***Conclusion***

Art Unit: 2193

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A Vu whose telephone number is (571) 272-3735. The examiner can normally be reached on 8AM-4:30PM/Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571)272-3756.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-3735 ( for non-official correspondence - please consult Examiner before using) or 571-273-8300 ( for official correspondence) or redirected to customer service at 571-272-3609.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tuan A Vu  
Patent Examiner,  
Art Unit 2193  
July 22, 2007